

Appl. No.: 10/606,128
Amdt. Dated: 08/06/2004
Off. Act. Dated: 05/06/2004

Amendments to the Specification:

Please replace paragraph [0030] with the following amended paragraph:

[0030] FIG. 1 shows a block diagram of an embodiment of a parallel hybrid electric CVT system 10 designed for low fuel consumption and emissions, and high performance according to the present invention. This figure shows an internal combustion engine 12 powered by a fuel supply 14, and an electric motor generator (E/MG) 16 coupled to the engine 12 either via a clutch 18 or other coupling device such as a torque converter, etc. E/MG 16 is powered by a battery 20, and the battery energy is controlled via an E/MG controller 22, which controls the torque on engine 12 applied by E/MG 16. E/MG 16 is coupled to a CVT or multispeed transmission 24 which receives, at its input, a combination of the engine torque (TE) and motor torque (TM) 26 and in turns a drive shaft 28. Drive shaft 28 is in turn coupled to a final drive 30 which turns an axle 32 which is coupled to the wheels 34. A control computer 36 sets the control parameters and monitors the operation of the system. The control parameters include, for example, ~~example,~~ the engine throttle 38, shift of ratio rate (rate of change of ratio) 40 of the CVT or multispeed transmission 24, and E/MG torque parameters 42 for controller 22. Operational characteristics that are monitored include the ratio 44 of the CVT or multispeed transmission 24, engine speed (SE) 46, depth of discharge 48 of the battery provided by a battery monitoring system (computer) 50, vehicle speed 52, and driver input 54 (e.g., accelerator/brake pedal motion). Engine torque (TE) 56 to the extent required is not measured directly but is derived from the ideal operation line (IOL).